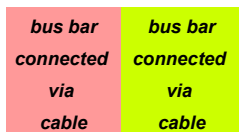


Solar Trailer Battery Array

**Negative "start"
for entire
Battery**

Battery Bank left

#	Terminal		bus bar	
	left	right	left	right
1	neg	pos	a	b
2	neg	pos	a	b
3	neg	pos	a	b
4	neg	pos	a	b
5	neg	pos	a	b
6	neg	pos	a	b
7	pos	neg	a	c
8	pos	neg	a	c
9	pos	neg	a	c
10	pos	neg	a	c
11	pos	neg	a	c
12	pos	neg	a	c
13	neg	pos	d	c
14	neg	pos	d	c
15	neg	pos	d	c
16	neg	pos	d	c
17	neg	pos	d	c
18	neg	pos	d	c
19	pos	neg	d	e
20	pos	neg	d	e
21	pos	neg	d	e



Battery Bank right

#	Terminal		bus bar	
	left	right	left	right
22	pos	neg	d	e
23	pos	neg	d	e
24	pos	neg	d	e
25	neg	pos	f	e
26	neg	pos	f	e
27	neg	pos	f	e
28	neg	pos	f	e
29	neg	pos	f	e
30	neg	pos	f	e
31	pos	neg	f	g
32	pos	neg	f	g
33	pos	neg	f	g
34	pos	neg	f	g
35	pos	neg	f	g
36	pos	neg	f	g

Pictured is a single "module" from a Nis
Each is about 8 volts DC at full charge.
Half of the cells have a positive (red) te
The center terminal is for monitoring
A Leaf had 48 of these modules.
The trailer has 42 modules
For weight and balance considerations,

6 modules are wired in parallel to produ
We'll call that set of 6 a "Set"
So there are 7 Sets.
The Sets are connected in series
So 2 Sets connected, and measured fro
So all 7 sets, connected in series, = 56
In use, this sits at "essentially" a target

Let's trace some expected voltages, as:

Bus bar a	to	Bus bar b	8 VDC
		c	16
		d	24
		e	32
		f	40
		g	48
		h	56

Each module has 4 mounting holes at t
4 threaded rods run from one end to the
This holds batteries together (as do the
But most of the strength of each Bank is
On the up-facing side where the termin

37	neg	pos
38	neg	pos
39	neg	pos
40	neg	pos
41	neg	pos
42	neg	pos



**Positive "end"
for entire
Battery**

Sheet1

San leaf battery (generation1, 2011-15)

terminal on the left, and the other half are opposite

the trailer has the 42 divided into 2 "Banks" of 21 each.

ice more current, but still at 8 volts



From the negative "start" of the first one to the positive "end" of the second one = 16 VDC

VDC

voltage of 48 VDC

suming all modules are charged to exactly 8 VDC

he corners.

Other of all 4 holes of all 21 batteries each Bank.

(copper bus strips)

is provided by the external plywood case.

als and bus strips are visible are 2 plywood strips which, if removed, would allow the stacked modules

to be slid out.

